

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-29 are pending in this case. Claims 1, 9-16, 19-22, and 27-29 are amended by the present Amendment. Amended Claims 1, 9-16, 19-22, and 27-29 are supported in the specification at least at page 22, lines 13-18 and original Claims 1-2. No new matter has been added.

In the outstanding Office Action, Claims 1-5 and 9-29 were rejected under 35 U.S.C. §102(b) as anticipated by International Standard, Information Technology-JPEG 2000 Image Coding System (ISO/IEC 15444-1, hereinafter “ISO/IEC”); and Claims 6-8 were rejected under 35 U.S.C. §103(a) as unpatentable over ISO/IEC.

At the outset, Applicants direct the Examiner’s attention to application 10/729,102 pursuant to McKesson Information Solutions v. Bridge Medical Inc. (Fed Cir., 2007) as related subject matter has been recently indicated as allowed in this case.

Rejection under 35 U.S.C. §102(b)

In response to the rejection of Claims 1-5 and 9-29 under 35 U.S.C. §102(b) as anticipated by ISO/IEC, Applicants respectfully submit that amended independent Claims 1, 9-15, 19-22, and 27-29 recite novel features clearly not taught or rendered obvious by the applied references.

Amended independent Claim 1 is directed to an image encoding apparatus including, *inter alia*:

...encoding object predicting means for predicting the number of bitplanes for encoding, as object of the encoding, and for extracting, from an upper bit side of each code block, only a number of bitplanes corresponding to the predicted number of bitplanes for encoding;....

Turning now to the applied reference, ISO/IEC describes an image decoding system called JPEG-2000. However, ISO/IEC does not teach or suggest “encoding object predicting means for *predicting the number of bitplanes* for encoding, as object of the encoding, and for *extracting*, from an upper bit side of each block, *only* a number of bitplanes *corresponding to the predicted number of bitplanes for encoding*,” as in Applicants’ amended independent Claim 1.

The outstanding Office Action at page 16 states that it “is noted that ISO/IEC teaches the code-blocks bit-planes are scanned and Fig. D-1 is an example of such a scanned pattern. Thus, each bitplane is extracted through the scanning process.” Assuming *arguendo*, that scanning the bitplanes is equivalent to extracting the bitplanes, Figure D-1 and Annex D fail to teach or suggest that *only* the predicted number of bitplanes for encoding are extracted. In contrast, Section D.1 states that “[e]ach bit plane of a code-block is scanned in a particular order.” (Emphasis added).¹ Further, neither Annex D nor any other portion of ISO/IEC describes that the bitplanes that are scanned in Figure D-1 correspond to “the predicted number of bitplanes for encoding.” Thus, ISO/IEC fails to teach or suggest each and every element of independent Claim 1.

Independent Claims 10, 12, 14, 22, and 27-29 recite “encoding object predicting means for predicting the number of bitplanes for encoding, as object of the encoding, and for extracting, from an upper bit side of each block, only a number of bitplanes corresponding to the predicted number of bitplanes for encoding.” Therefore independent Claims 10, 12, 14, 22, and 27-29 are believed to be patentable for at least the reasons discussed above.

Accordingly, Applicants respectfully submit that independent Claims 1, 10, 12, 14, 22, 27-29, and all claims depending therefrom are patentable.

¹ See page 99 of ISO/IEC.

Turning now to independent Claim 16, Claim 16 is directed to an image encoding apparatus including, *inter alia*:

...encoding object predicting means for counting the number of effective bitplanes, excluding zero bitplanes, for the totality of the code blocks in a frame in an input picture, and reference is made to a predetermined table, based on the count results, to find the number of bitplanes for encoding, from one frame to another....

Independent Claims 19-21 also recite “encoding object predicting means for counting the number of effective bitplanes, excluding zero bitplanes, for the totality of the code blocks in a frame in an input picture, and reference is made to a predetermined table, based on the count results, to find the number of bitplanes for encoding, from one frame to another.” Therefore, the arguments presented below with respect to independent Claim 16 are applicable to each of independent Claims 19-21.

ISO/IEC fails to teach or suggest *counting the number of effective bitplanes*, excluding zero bitplanes, for the totality of the code blocks in a frame in an input picture. Section D.3.5 and Table D-6 of ISO/IEC describes an example of the decoding order for the quantized coefficients of one 4-coefficient column in a scan. However, neither Annex D nor any other portion of ISO/IEC teaches “counting the number of effective bitplanes, excluding zero bitplanes, for the totality of the code blocks in a frame in an input picture. Further, the outstanding Office Action at page 10 fails to point to an equivalent feature in ISO/IEC.

ISO/IEC also fails to teach or suggest that “reference is made to *a predetermined table, based on the count results*, to find the number of bitplanes for encoding, from one frame to another.” Page 10 of the outstanding Office Action contends that ISO/IEC “teaches wherein said predetermined table is such a table in which the range of values of the effective bitplanes is correlated with the number of the bitplanes for encoding (Table D-9).” Table D-9 of ISO/IEC shows the pass type associated with various bitplanes, Table D-9 does not teach

or suggest that “reference is made to a predetermined table, based on the count results, to find the number of bitplanes for encoding, from one frame to another.” Assuming *arguendo*, that Table D-9 of ISO/IEC is a “predetermined table,” reference is not made to Table D-9 based ***on the count results*** of the encoding object predicting means.

Accordingly, independent Claims 16 and 19-21 and all claims depending therefrom are believed to patentably define over ISO/IEC.

Independent Claims 9, 11, 13, and 15 recite “...counting the number of effective bitplanes, excluding zero bitplanes, for the totality of the code blocks in a frame in an input picture, and reference is made to a predetermined table, based on the count results, to find the number of bitplanes for encoding, from one frame to another,” and are believed to be patentable for at least the reasons discussed above.

Accordingly, Applicants respectfully request the rejection of Claims 1-5 and 9-29 under 35 U.S.C. §102(b), be withdrawn.

Rejection under 35 U.S.C. §103(a)

In response to the rejection of Claims 6-8 under 35 U.S.C. 35 U.S.C. §103(a) as unpatentable over ISO/IEC, Applicants note that Claims 6-8 are dependent on independent Claim 1 and are thus believed to be patentable for at least the reasons discussed above.

Accordingly, Applicants respectfully request the rejection of Claims 6-8 under 35 U.S.C. 35 U.S.C. §103(a), be withdrawn.

Consequently, in view of the foregoing amendment and remarks, it is respectfully submitted that the present Application, including Claims 1-29, is patentably distinguished over the prior art, in condition for allowance, and such is respectfully requested at an early date.

Respectfully submitted,


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